Checklist for Single Family Dwellings and Duplexes

3/18/13

Document Submittal Package Information:

- A. Additions to Single Family Dwellings see http://www.sanjoseca.gov/DocumentCenter/View/1834
- B. New Single Family Dwellings or Complete Rebuilds see http://www.sanjoseca.gov/DocumentCenter/View/1833

Checklist: (Based on the 2010 technical codes adopted by the City of San Jose)

The following is a compilation of the most common plan review items pertaining to single family dwelling projects as identified by the City of San Jose Building Division Plan Check section. Please review and consider these comments as you prepare your plans for building permit application. We hope these will help facilitate a quality plan submittal and the streamlined review and permit issuance of your project.

Item#	Sheet #	
1		Indicate on the plans the name of the legal owner and the name, address and phone number of the person responsible for the preparation of the plans. (Business and Professions Code 5536.2). The plans must be signed.
2		Provide a fully dimensioned plot plan drawn to scale showing the locations, size, use and type of construction of all structures on the lot. Identify property lines and show lot dimensions. Show interior lot lines, if applicable.
3		Cross reference all details and sections. Remove all non-applicable details from the plan set.
4		Construction documents prepared by design professionals licensed by the State of California:
		 a) If civil engineering specification, calculations, or reports are required to be signed and sealed or stamped, and have multiple pages, the seal or stamp, wet signature and the date of signing and sealing or stamping shall appear (at a minimum) on the title sheet, cover sheet, or signature sheet. (16 CCR 411)
		b) Drawings and documents prepared by an architect shall bear the architect's stamp with his or her renewal date, either written or date printed on the stamp. (Architects Practice Act)
5		Provide a scope of work statement on the plans identifying all work proposed under this permit.
6		Provide an automatic fire sprinkler system designed per NFPA 13D with San Jose amendments for the following project scopes:
		a) Additions greater than 500 sq. ft that result in a total building area (including garage) greater than 3,600 sq. ft.b) Complete rebuilds
		c) New dwellings (excludes detached accessory structures) Please note that a separate permit for the sprinkler system is applied for with the San Jose Bureau of Fire Prevention.
7		The licensed design professional shall provide a complete an accurate list in one location on the plans identifying all work requiring special inspection per CBC Chapt. 17, when applicable.
8		Please submit a complete Special Inspection form signed by all the parties, with the exception of the Building Official. http://www.sanjoseca.gov/DocumentCenter/View/2142 or http://www.sanjoseca.gov/DocumentCenter/View/2141

	Note: a) Retrofit holdown anchors may be inspected by the engineer of record. The EOR shall
	provide a letter to the City field inspector at the time of holdown inspection describing the results of the inspection(s). If this option is chosen, please provide a note to that affect on the plans under "special inspection".
	b) City field inspectors can inspect retrofit holdown anchors for Conventional Alternate Braced Wall Panels with embedment and type of epoxy specified on the plans.
9	Show and specify how noise attenuation will be provided between the dwelling units of duplexes. (CBC 1207, 1207.6 and 1207.7)
10	Specify on the plans the 1-hour fire rated construction at wall and floors separating dwelling units in duplexes. (CRCR302.3)
11	Protect walls and soffits of interior stairs on the enclosed side with ½" gypsum board (e.g. closet, pantry, powder room, etc). (CRC R302.7)
12	Provide occupancy separation between the dwelling and the carport when enclosed uses are located above the carport, or where the carport is not entirely open on two or more sides. (CRC R302.6)
13	The garage or carport shall be separated from all habitable rooms above with not less than 5/8" Type X gypsum board, or equivalent. (CRC Table R302.6)
	(Note: "habitable space" is defined as space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closet, halls, storage or utility spaces and similar areas are NOT considered habitable spaces.)
14	All structural elements supporting the floor/ceiling assemblies used as a fire rated separation shall have ½" gypsum board protection. (CRC Table R302.6)
15	Provide ½" gypsum board separation on the garage side of walls adjoining the dwelling. (CRC Table R302.6)
16	Garages are not permitted to open directly into a room used for sleeping purposes. (CRC R302.5.1)
17	Show and specify one of the following measures to provide opening protection between the dwelling and the garage. Doors shall be self-closing and self-latching. (CRC R302.5.1)
	 a) Solid wood doors not less than 1-3/8" thick, or b) Solid or honeycombed core steel doors not less than 1-3/8" thick, or c) A 20-minute fire rated door
18	Show and specify a 7 ft. minimum ceiling height for all habitable rooms. (CRC R305.1). See CRC R305.1 for specific exceptions.
19	One room shall be a minimum of 120 sf of floor area. (CRC R304.1)
20	No habitable room other than a kitchen shall be less than 7'-0" in any dimension and less than 70 sq. ft. in area. (CRC R304.2 and R304.3)
21	Exterior glazed opening area must be at least 8% of the floor area of all habitable rooms. (CRC R303.1). See CRC R303.1 for specific exceptions.
22	Openable exterior opening area must be 4% of the floor area. (CRC R303.1) See also http://www.sanjoseca.gov/DocumentCenter/View/9202 for applicable Energy Compliance requirements.
23	Dimension eave projections and verify that they conform to the limitations prescribed under CRC Section R302 and Tables R302.1(1) for non-sprinklered dwellings, or Table R302.1(2) for sprinklered dwellings.

	Provide construction details for 1-hour fire protected eaves where they occur.
24	Specify on plan a minimum 15 inch dimension from centerline of water closets to each side. (CPC 407.5)
25	Specify shower pan dimensions indicating a minimum area of 1024 sq. inches and a minimum finish dimension of 30 inches in any directions. Specify an outward swinging 22 inch minimum clear door opening for the shower door.
26	For new residences or additions greater than 1000 sq. ft, show and specify the method of house ventilation that is required by Title 24, Part 6 (i.e. Energy Compliance Standards) mandatory measures #150(o) and the ASHRAE 62.2 standards. For more information see Plan Check Note #28: http://www.sanjoseca.gov/DocumentCenter/View/9202
27	Show and specify smoke alarms in the following locations (CRC R314):
	 a) In each sleeping room b) Outside each separate sleeping area in the immediate vicinity of the bedrooms c) On each additional story of the dwelling, including basements and habitable attics
28	Show and specify carbon monoxide alarms in the following locations (CRC R315):
	a) Outside each separate sleeping area in the immediate vicinity of the bedroom(s)b) On every level of a dwelling unit including basements
29	Show and specify locations where safety glazing is required. Areas where safety glazing are required include (CRC R308.4): See CRC R308.4 for specific exceptions.
	 a) Glazing in all fixed and operable panels of swinging, sliding and bifold doors. b) Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24-inch (610 mm) arc of the door in a closed position and whose bottom edge is less than 60 inches (1524 mm) above the floor or walking surface. c) Glazing in an individual fixed or operable panel that meets all of the following conditions: The exposed area of an individual pane is larger than 9 square feet (0.836 m2); and The bottom edge of the glazing is less than 18 inches (457 mm) above the floor; and The top edge of the glazing is more than 36 inches (914 mm) above the floor; and One or more walking surfaces are within 36 inches (914 mm), measured horizontally and in a straight line, of the glazing. d) All glazing in railings regardless of area or height above a walking surface. Included are structural baluster panels and nonstructural infill panels. e) Glazing in enclosures for or walls facing hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface. f) Glazing in walls and fences adjacent to indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60 inches (1524 mm) above a walking surface and within 60 inches (1524 mm), measured horizontally and in a straight line, of the water's edge. This shall apply to single glazing and all panes in multiple glazing. g) Glazing adjacent to stairways, landings and ramps within 36 inches (914 mm) horizontally of a walking surface when the exposed surface of the glazing is less than 60 inches (1524 mm) above the plane of the adjacent walking surface. h) Glazing adjacent to stairways within 60 inches (1524 mm) horizontally of the bottom tread of a stairway in any directio
30	Basements in dwelling units and sleeping rooms must have a window or exterior door for emergency exit and rescue which opens directly onto a public way, alley, yard or exterior court. The window shall have a sill height 44" or less above finished floor, 5.7 sf of openable area, 24-inch net clear opening height, and 20-inch net clear opening width. (CRC R310) Exception: Grade floor openings may have a minimum net clear opening of 5 sf.
31	Habitable levels or basements located more than one story above or more than one story below an egress door shall are limited to a maximum travel distance of 50 feet, from any occupied point to a stairway or ramp that provides egress from such habitable level or basement. (CRC R311.4)

32	Required egress doorways shall be not less than 32" clear width (measured with door open 90° and not less than 6'-6" clear in height. (CRC R311.2)
33	A door may open at a landing that is not more than 7-3/4" lower than the floor level if the door does not swing over the landing. (CRC R311.3.1 & R311.3.2)
34	Show stairways and landing in conformance with CRC R311.7. a) Specify rise and run. (Maximum rise = 7 ¾", Minimum run = 10" from nosing to nosing.) A nosing measuring ¾"min. to1-1/4"max. is required on stairs where the tread depth is less than 11". b) Minimum headroom clearance of 6'-8". c) Handrails located between 34" min. and 38" max. from plane parallel to line at face of treads. d) Return handrails to the wall or terminate at newel post. e) Provide structural framing details for stairs and their supports.
35	Provide 42" min. high guard rails at balconies, and porches greater than 30" above finished grade which is measured as much as 3 ft. out. Show and specify distance between balustrade is such that a 4-inch sphere cannot pass through. Provide structural details and calculations in accordance with CRC R312.
36	Show location of water heater and forced air unit on the plans.
37	Water heater installations in bedrooms and bathrooms shall comply with either CPC 505.1 option #1 or option #2:
	Option #1: Fuel-burning water heaters may be installed in a closet located in the bedroom or bathroom provided the closet is equipped with a listed, gasketed door assembly and a listed self-closing device that does not have a hold-open feature. The assembly shall be installed with a threshold and bottom door seal. All combustion air for such installations shall be obtained from the outdoors. The closet shall be for the exclusive use of the water heater.
	Option #2: The water heater shall be of the direct vent type.
38	Central heating furnace installations or low-pressure boiler installations in bedrooms or bathrooms shall comply with CMC 904.1 option #1 or option #2:
	Option #1: Central heating furnaces and low-pressure boilers may be installed in a closet located in the bedroom or bathroom, provided the closet is equipped with a listed, gasketed door assembly and a listed self-closing device that does not have a hold-open feature. The assembly shall be installed with a threshold and bottom door seal. All combustion air for such installations shall be obtained from the outdoors. The closet shall be for the exclusive use of the furnace and low-pressure boiler.
	Option #2: The central heating furnaces and low-pressure boilers shall be of the direct-vent type.
39	Ventilation for mechanical clothes dryers shall be vented to the outside and comply with City of San Jose Building Division Directive M-001. See: http://www.sanjoseca.gov/DocumentCenter/View/981 for more information.
40	All new and existing fireplaces shall comply with http://www.sanjoseca.gov/DocumentCenter/View/995 and http://www.sanjoseca.gov/documentcenter/view/1877 Specify the make and model number on the plans.
41	Provide the CALGreen checklist on the plans indicating all the 'green' features proposed for the newly constructed residential dwelling. For reference see: http://www.sanjoseca.gov/DocumentCenter/View/13341
42	Show and specify under floor access. Specify minimum dimensions: 18" X 24". (CRC R408.4)
43	Provide the calculations for the minimum required under-floor ventilation and specify how cross ventilation will be accomplished. Typically, the net free area of ventilation openings shall not be less than 1/150of the under-floor area. See CRC R408 for exceptions.

44	Show and specify attic access. Specify minimum dimensions: 22" x 30". (CRC R807)
45	Provide the calculations for the minimum required roof (or attic) ventilation and specify how it will be accomplished. Typically, the net free ventilating area shall not be less than 1/150 of the area of the space ventilation. See CRC R806.2 for exceptions.
46	Show and specify a minimum roof slope of ¼" in 12 "for flat roofs. (CRC R905.9.1, R905.11.1, R905.12.1, R905.13.1, R905.14.1, and R905.15.1). For metal roof panels see CRC R905.10 for specific slope requirements.
47	Where the pitch is less than 3:12, design the ridge as a vertical load carrying member. (CRC R802.3)
48	Specify minimum class 'C' roofing on the plans. (CRC R902.1.3)
49	Specify the make and model number of the skylight(s) on the plans. Show and specify framing members around skylight openings. (CRC R802.9)
50	Show and specify skylight installed on 4-inch minimum high curb when the roof slope is less than 3:12. (CRC R308.6.8)
51	Show and specify the size of the ridge, hip and valley beams to be not less in depth than the cut end of the rafters. (CRC R 802.3)
52	Show adequate support for hips, valley beams, and ridge beams. (CRC R802.3)
53	Show and specify rafter ties or collar ties for roof framing in accordance with the CRC Section R802.3.1 and Table R802.5.1(9).
54	Detail all post-to-beam, post-to-footing and beam-to-beam connections or call out approved metal connectors.
55	Provide all truss calculations and details. All calculations and all details not transferred to the plans must be stamped and signed by an engineer or architect licensed by the State of California.
56	Specify the truss manufacturer and truss identification numbers. Provide truss framing key plan with all types of trusses identified on the plan. (CRC R802.10) Note: No deferred submittal of truss calculations/drawings will be allowed.
57	Note on the plans: "An AITC or APA-EWS Certificate of Conformance for glue-laminated members must be submitted to the City field inspector prior to installation." Provide glue-laminated specifications on the plans.
58	Provide metal tie straps at each rafter supported by a load-bearing ridge beam. (CRC R802.3.1)
59	Provide tie-down clips (e.g. Simpson H2) at each rafter to top plate. (CRC R802.11)
60	Specify how double-framing members are interconnected. (CRC Table R602.3(1))
61	Provide typical nailing schedule on the plans (CRC Table R602.3(1))
62	Bearing wall studs shall not exceed a height of 10 ft. (CRC Table R602.3(5))
63	Specify (on the plans) the material properties or approved listing number for each type of structural framing element identified on the plans.
64	Provide structural design calculations for rafters, joists, beams, girders, headers, posts and columns, for engineered structural framing systems, or use tables in 2010 CRC for Conventional Light Frame Construction.
65	Show details of veneer walls. Indicate anchorage, maximum height, and required footings, as applicable. (CRC Table R602.12(2))

66	Show and specify Conventional Light-Frame Construction lateral bracing provisions in accordance with CRC R602.10: a. Braced wall panel lengths and locations b. Type and thickness of panel sheathing, and connections to studs, sole plates and top plates.
67	 Where portions of the building do not satisfy Conventional Light-Frame Construction lateral bracing provisions: a. Provide structural calculations tracing the load path from roof to foundation. Design and detail all elements of the lateral force resisting system. b. Specify the minimum length of each shear wall, or shear wall segment. c. Provide in-plane shear capacity check for walls with height to width ratios exceeding 2:1. (ANSI/AF&PA SDPWS-2008 Sect. 4.3.4) d. Specify size, type and spacing of plywood nailing e. Specify size, type and spacing of sill connections f. Show and specify adequate footings under all shear walls and at ends of panels with holdowns. g. Specify size, embedment and distance from center of holdown anchors to edge and sides of foundations on the foundation plan. h. Note on the foundation plan: "Holdown anchors to be tied in place prior to calling for foundation inspection. i. Show and specify all lateral force transfer details.
68	Provide engineering design calculations and complete details for all retaining walls: a. Indicate drainage, b. Specify location and size of horizontal and vertical reinforcing c. Specify maximum height of retained soil, surcharges, and slope of fill behind wall
69	Dimension continuous exterior and all interior bearing wall foundations a. Specify minimum depth of footing in undisturbed natural soil (CRC R403.1.4) b. Specify minimum height above finished grade (CRC R317.1 & R404.1.6) c. Specify bearing width (CRC Table 403.1) d. Specify minimum stem wall width and footing thickness (CRC R404.1.4.2)
70	Specify the report number (e.g. ICC or IAPMO), name of manufacturer, size and minimum embedment of expansion anchors, epoxy anchors, or powder-driven pins. Show and specify the required edge and end distances, and spacing between fasteners. (CRC R403.1.6 & R403.1.6.1)
71	Provide a site specific soils report or specify how the project is exempt per Building Directive #B002: http://www.sanjoseca.gov/DocumentCenter/View/977